REMARKS

The Examiner is respectfully requested to review this application which has been amended after a careful consideration of the Examiner's comments in the above-identified Office Action. In that Office Action, the Examiner objected to the specification regarding the disclosure of the second means for linearizing the output. The specification does disclose this feature at page 2, lines 10-20 and also additionally at page 4, lines 20-25. The Examiner also rejected claims 1-3 as being either anticipated by or obvious in view of the Adolfsoon reference (US 4,547,729) and the Goldner reference (US 6,211,982). Claim 1 has been amended to more distinctly point out applicants' invention and claim 3 has been canceled. An Information Disclosure Statement also accompanies this amendment, the consideration of which by the Examiner is respectfully requested. It is applicants' opinion that claims 1 and 2, as amended, patentably distinguish over the prior art including the cited references and the Feng reference listed in the accompanying Information Disclosure Statement.

For example, while the Adolfsoon reference shows a basic current measuring device and the Feng article discusses mechanical prestress for a fiber Bragg grating inside a solenoid, there is no teaching of applicants' invention as recited in claim 1 for an optical current sensor that includes both DC magnetic bias and mechanical prestress bias to a modulator for linearizing the output thereof. Claims 2 and 3 recite additional features relating respectively to the first means and the second means. Accordingly, claims 1-3, as amended, and this application are considered to be in a condition for allowance and a favorable action to that end and allowance of this application by the Examiner are respectfully requested. If the Examiner feels that clarification of any issue or comment herein would be helpful to facilitate prosecution of this application, the Examiner is respectfully requested to contact the undersigned attorney at the number listed below for a telephonic interview or to arrange a personal interview.

Respectfully submitted,

James V. Lapacek Reg. No. 26,933

Attorney for Applicants

S&C Electric Company 6601 N. Ridge Blvd. Chicago, IL 60626

Telephone: (773) 338-1000 Facsimile: (773) 381-4936

March 2, 2006